



## LifeXtend™ Alkaline Phosphatase Conjugate Stabilizer/Diluent

902-0005 50ml stabilizer/diluent

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### Introduction

The performance of Alkaline Phosphatase conjugates diminishes over time. There are a number of factors that contribute to this loss of performance including (i) inactivation of the enzyme, (ii) instability of the bond which links Alkaline Phosphatase to the antibody, (iii) microbial attack and (iv) denaturation of the antibody. Loss of performance accelerates with increasing temperature and with increasing dilution of conjugate. For these reasons Alkaline Phosphatase conjugates are often kept in a concentrated form at 4°C.

LifeXtend™ conjugate stabilizer/diluent is a proprietary multi-component reagent system that protects antibody-Alk Phos conjugates from all of the negative factors noted above, thus ensuring the best possible performance in experiments performed at room temperature. Moreover, the ability to store Alkaline Phosphatase conjugates at working concentration eliminates waste and improves consistency from experiment to experiment.

In addition to its proprietary enzyme stabilizers, LifeXtend™ contains antimicrobial agents as well as blockers to enhance signal to background in immunoassay applications.

### Storage of LifeXtend™

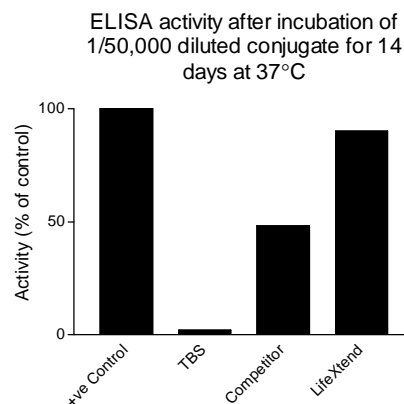
LifeXtend™ Alkaline Phosphatase conjugate stabilizer/diluent is shipped at ambient temperature and should be stored at 4°C.

### Comparison with another well known brand of stabilizer (Fig 1)

Alkaline Phosphatase conjugated goat anti-rabbit IgG (1mg/ml) was diluted 1/50,000 in each of the two stabilizers and in TBS and incubated for 14 days at 37°C. An undiluted control sample was incubated at 4°C for the same period and

diluted 1/50,000 prior to ELISA testing. Conjugates were incubated on a rabbit IgG-coated plate for 1 hour at room temperature, followed by washing and determination of Alkaline Phosphatase activity using PNPP substrate.

**Figure 1. Stability of Alkaline Phosphatase conjugates**



As can be seen above, one of the best known stabilizers perform only modestly in standard accelerated stability trials at 37°C. LifeXtend™ Alkaline Phosphatase stabilizer/diluent affords the greatest protection and can substantially extend the shelf life of Alkaline Phosphatase conjugates stored at 4°C or at room temperature.

### Related product

Lightning-Link™ HRP conjugation kits – the world's easiest conjugation system, requiring just thirty seconds hands-on time to set up antibody conjugation reactions.

702-0010 LL-AP conjugation kit, 3 x 100 ug AP

702-0015 LL-AP conjugation kit, 1 x 1mg AP

Other pack sizes also available.

For further information on Innova's products see [www.innovabiosciences.com](http://www.innovabiosciences.com)